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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/553,006

12/01/2005

Hayahide Yamasaki

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513 7590 07/07/2008

WENDEROTH, LIND & PONACK, L.L.P.

2033 K STREET N. W.

SUITE 800

WASHINGTON, DC 20006-1021

EXAMINER

NGUYEN, THUY-AI N

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

07/07/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/553,006	<b>Applicant(s)</b> YAMASAKI, HAYAHIDE	
	<b>Examiner</b> THUY-AI N. NGUYEN	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04/02/2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 10, 11 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10, 11 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/02/2008, 06/09/2008</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

Applicant's response filed on 04/02/2008 has been fully considered. Claims 10, 11 and 13 are pending.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Babinec et al. (US.6, 380, 294).

Regarding claim 10, Babinec et al. teach a polyaniline- containing composition comprising polyaniline, a dopant, and inorganic compound (abstract) and water (col. 11: 15- col. 13: 40), wherein dopant is a polymer having an acid group such as phosphoric acid group, sulfonic acid group or carboxyl group (col. 13: 10- 20).

Regarding claim 11 and 13, Babinec et al. teach the polyaniline -containing composition comprising from 0.01 to 99 percent by weight of the composition of one or more conductivity (abstract); including polyaniline (col. 11: 15- 67), and inorganic compound (col. 13: 34- 67), wherein the dopants can be in solid state (col. 12: 10- 15).

Babinec et al. do not teach the specific amount of the dopant, or emulsion polymers in the composition. However, Babinec et al. teach that amount of dopants are sufficient that the dopped polyaniline will reach the maximum conductivity (col. 12: 16- 30). Babinec et al. further teach the amount of dopant will not exceed amount of polyaniline that is need to be doped (col. 12: 25- 30). Thus, it is obvious

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that the amount of dopants would be optimized to fall in the range as set by the applicant because the amount of polyaniline is within the range as recited in the claim.

### ***Response to Arguments***

Applicant's arguments filed April 2, 2008 have been fully considered but they are not persuasive.

According to the applicant's argument, Babinec et al. discloses a dopant that contains the acid group (i.e. carboxylic, sulfonic including dodecylbenzenesulfonic acid) (col. 13: 10- 30), wherein the polyaniline is doped with dopant which is dispersed in the solution. Because the dopants in the instant prior art have the acid group as claimed, they have the same properties to disperse the polyaniline uniformly in the composition. Thus, they are emulsion polymers.

Because the amount of inorganic compound and polyaniline are from 0.01 to 99 percent of the composition, they will fall within the range as set forth by the applicant.

In response to applicant's argument that the dopant polymer of Babinec et al. is not an emulsion polymer, it is submitted that the method of making the polymer by "emulsion" does not appear to structurally distinguish the material since many polymer can be made by various polymerization techniques. In the instant claim, the structurally distinguishing structure is the acid group. Furthermore, it is noted that Babinec et al. also teaches that various suitable dopants, including polymeric ones, "are known in the art or may be readily determined experimentally" (12:30-45). As such, it is maintained that the dopants of Babinec et al. meet the recited dopant structure as instantly claimed.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date

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of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### *Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THUY-AI N. NGUYEN whose telephone number is (571)270-3294. The examiner can normally be reached on Monday-Friday: 8:30 a.m. - 5:00 p.m. eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARK EASHOO, PhD./  
Supervisory Patent Examiner, Art Unit 1796  
3-Jul-08

June 27, 2008  
  
Patent Examiner  
Thuy- Ai N. Nguyen